



Agenda Item No. 6.C.

To: Board of Directors
Meeting of April 22, 2005

From: Ewa Z. Bauer, Deputy District Engineer
Denis J. Mulligan, District Engineer
Celia G. Kupersmith, General Manager

Subject: **STATUS REPORT ON ENGINEERING PROJECTS**

Recommendation

The following report is provided for informational purposes and no action is required.

Summary

Phase II: Golden Gate Bridge Seismic Retrofit of South Approach Structures, Contract No. 99-B-5. This contract includes structural retrofit of the South Approach Viaduct (SAV), the South Anchorage Housing, Pylons S1 and S2, and the Fort Point Arch (FPA); relocation of various utilities; and retrofit of utility conduits along the south approach structures.

On May 11, 2001, the Board awarded the contract to the low bidder, Shimmick Construction Company, Inc./Obayashi Corporation, a Joint Venture, in the amount of \$122,292,503. The Notice to Proceed was issued to the Contractor on June 4, 2001. Weekly construction meetings between the District and the Contractor are being held every Friday.

Concrete strut construction and concrete finish work on the new shear walls inside the South Anchorage Housing remain to be done. Work on the removal and reconstruction of the west wall of the South Anchorage Housing is on hold pending completion of the pylon concrete cover. Electrical, drainage and backfill operations are continuing inside the South Anchorage Housing.

Paint operations are proceeding throughout the FPA Deck Truss and Lower Arch. Structural steel work is progressing at all retrofit locations of the FPA Deck Truss and lower portion of the Fort Point Arch.

The SAV new Tower 1, Tower 2, Tower 3, Bent S9 and Bent S10 are complete. Work is progressing at the Span 6-Pylon S2 interface.

The steel plating installation at Pylon S1 is complete. Cleaning and coating the plating is progressing at Pylon S1. The steel plating inside and around the west and east legs of Pylon S2 is progressing. Scaffolding and swing staging are being utilized around the legs of both pylons to access higher elevations.

Shop fabrication of structural steel members at XKT on Mare Island is complete. Fabrication of miscellaneous steel members continues at Mountain States Steel in Utah.

All CIDH piling and tie-down work is complete.

Night work on the isolation deck joints at Pylons S1 and S2 is complete. Night work has resumed on the sidewalk expansion joints, and the South Abutment and Pylon S2 isolation joints will follow.

Frequent meetings involving the District, the Designers and the Contractor are being held to facilitate efficient exchanges of information to mutually resolve arising issues and to maintain a cooperative relationship to the benefit of the project. Management-level partnering meetings are held every three months.

On June 25, 2004, the Board increased the contingency by \$6,765,000 to finance two CCOs covering repair and painting of steel members of the Fort Point Arch. On August 27, 2004, the Board increased the contingency by \$6,250,000 to finance five CCOs covering repair and painting of steel elements in the South Approach Viaduct. This increased the authorized contract contingency to \$25,315,000. The total of authorized CCOs is approximately \$23,315,000, leaving the available contingency funds at \$1,000,000.

Phase III: Golden Gate bridge Seismic Retrofit Phase IIIA, North Anchorage Housing and North Pylon, Design and Prepare Bid Documents; Contract No. 2004-B-6. The North Anchorage Housing and the North Pylon are part of the Phase III Golden Gate Bridge Seismic Retrofit Project. At its June 25, 2004, meeting, the Board of Directors awarded the professional services contract to HDR Engineering, Inc. The consultant is proceeding with the design work.

To comply with the Federal Highway Administration project development procedures, in December 2004 the District conducted a formal Value Engineering study of Phase IIIA with the assistance of a consultant, Value Management Strategies, Inc. (VMS). A professional services contract in the amount of \$58,109 was awarded to VMS in November 2004 after a competitive consultant selection process. Staff is working to finalize the plans, specifications and estimate. The plans and specifications have been submitted to Caltrans and FHWA for review.

Biennial Bridge Inspection Program. In order to ascertain the structural condition of the Bridge and in order to comply with FHWA regulations, the District started the Biennial Bridge Inspection Program on May 21, 2001. Inspection of the suspension spans, main towers, North Anchorage Housing, and North Approach Viaduct was completed. This inspection data was analyzed and organized to facilitate Bridge maintenance operations and to assist the budget development process. The final inspection report was submitted to FHWA and Caltrans on April 25, 2002. The next Biennial Bridge Inspection has commenced. This work inspected the South Approach Structures, since this area was not part of the 2001 Inspection, and this inspection revisited those bridge components identified as level "red" in the 2001 Inspection. Inspection of Spans 4, 5 and 6 of the South Approach Viaduct was completed in April 2003. Inspection of the Suspension Bridge, North Anchorage Housing and North Approach Viaduct was completed in May 2004. The inspection report is being prepared for submission to Caltrans and FHWA.

Golden Gate Bridge Main Cable Renovation. On April 13, 2001, the Board accepted staff's recommendation to revise the contract documents and to re-advertise the project for construction bids. The revisions will include adding provisions for alternate work access systems to be proposed by contractors. Plans are being revised and specifications are being finalized.

Seismic Instrumentation. The State of California, Division of Mines and Geology – Strong Motion Instrumentation Program (SMIP) has completed installing and testing the Phase I seismic instrumentation system. Seventy-six seismic sensors and two recording stations have been installed.

A panel meeting was held on April 10, 2001, and the panel approved the Phase II sensor locations for the South Approach Structures. Twenty-two additional sensors were proposed for the South Approach and have been included as part of the Phase II Seismic Retrofit project. Three additional sensors at the downhole location were recommended by the panel. Another panel meeting was held September 24, 2002, and the panel approved the design plans of Phase II Seismic Instrumentation, North Approach Structures. Twenty-four additional sensors for the North Approach were added to the Seismic Instrumentation System. Subsequent panel meetings were held on September 30, 2003 and September 21, 2004, to review the progress of construction of Phase II Seismic Instrumentation and the MEMS system being developed by U.C. Berkeley Citris program.

Earthquake Response Plan. During the past five years, staff developed and finalized an Earthquake Response Plan. The Plan recommends establishment of an on-call Bridge emergency repair service and computer analytical capability. A recommended list of on-call contractors was approved by the Board on November 9, 2000. Staff is establishing an in-house computer analytical system with assistance from International Civil Engineering Inc. (ICEC) for computer model conversion and earthquake input data analysis. On December 12, 2000, ICEC submitted a report on the conversion of the retrofit Suspension Bridge computer model to the ADINA program. ICEC submitted the final report for the conversion of the South Approach Structures models for review on October 31, 2003. The conversion of the North Viaduct models is pending. On June 13, 2002, SMIP installed an independent seismic sensor with a warning light and buzzer in the Sergeant's control room. On April 5, 2005, the Bridge Earthquake Response Pager System was tested with satisfactory results.

On August 7, 2002, the Ironworkers, the Engineers and the Inspectors were given training in performing post-earthquake Bridge inspection in accordance with the Earthquake Response Plan.

Fire Suppression System for Computer Rooms, Contract No. 2005-D-1. Staff worked with a specialized fire protection consultant to prepare the design plans and bid documents for fire suppression at one computer room and one telecomm room at the Toll Plaza and one telecomm room at the San Rafael Bus Facility to protect the computer equipment and data in the event of a fire. The project was advertised for bids on July 20, 2004. Bids were opened August 17, 2004. The recommendation to award contract to low bidder Intelligent Technologies and Services, Inc. was approved by the Board on August 27, 2004. The Notice to Proceed was issued effective September 13, 2004. Contractor started installation of the fire suppression system on September 27, 2004. Construction was completed on November 16, 2004. The clean agent fire suppression systems are now functional and protecting the District's computer equipment and data against fire.

Toll Plaza Administration Trailers Rehabilitation, Phase II, Contract No. 2005-D-2. Staff prepared design plans and bid documents to rehabilitate the computer support trailer, the computer annex trailer, the public information trailer, the auditing trailer, and the seismic consultant trailer to correct some health and safety concerns and to improve working efficiency and general aesthetics of the facilities. This project was advertised for bids on August 17, 2004. The Board awarded the contract to low-bidder BMC Contractors on October 22, 2004. The contractor started work on November 17, 2004, and has

substantially completed all work except some minor punch list items. The project was completed on March 8, 2005.

Toll Plaza Administration Building HVAC Improvements, Contract No. 2004-D-3. Staff is working with a mechanical consultant to perform an investigation to prepare a list of recommended improvements to the existing HVAC system. The preparation of design plans and bid documents will follow in 2005 after the recommendation has been approved.

BUS TRANSIT FACILITIES

San Rafael Bus Facility Gas Tank Replacement, Contract No. 2004-BT-9. Staff prepared the design plans and bid documents to remove the existing single-wall gas storage tank to comply with regulatory requirements. The new tank is an aboveground double-walled tank. This project was advertised for bids on May 18, 2004.

Bids were opened on June 15, 2004. The award of contract to low bidder was approved by the Board on June 25, 2004. Notice to Proceed was issued July 19, 2004, to American Construction & Environmental Services, Inc. The project was completed on March 17, 2005.

Marin County Bus Stop Improvements, Contract No. 2004-BT-10. This project involves one bus stop improvement in Tiburon and modifications to the bus stops in Mill Valley and San Rafael for ADA compliance. The project was advertised for bids on April 13, 2004. The Caltrans encroachment permit for the Tiburon jobsite was issued to bidders by Addendum No. 2. Bids were opened on May 18, 2004, and the recommendation to award contract to low bidder was approved by the Board on June 25, 2004.

Notice to Proceed was issued July 14, 2004, to Stone Engineering Contractors. The Contractor obtained the encroachment permit from Caltrans and started field work at the Tiburon site on September 7, 2004. The entire project was completed on February 22, 2005.

Santa Rosa Bus Facility Emergency Power Generator Installation, Contract No. 2004-BT-1. Staff has prepared the bid documents to install a new 100 kW emergency power generator. The contract was advertised for bids on June 17, and bids were opened July 15, 2003. The recommendation to award contract to low bidder Reliance Enterprises was approved by the B&O Committee on July 24, 2003, and the Board on August 8, 2003. The Notice to Proceed was issued effective September 10, 2003.

The Contractor completed installation of the generator on April 2, 2004, and final punch list items on May 5, 2004. The system is now functional and ready to provide emergency power in case of blackout.

San Rafael and Novato Pavement Rehabilitation, Contract No. 2004-BT-8. Staff prepared the design plans and bid documents to rehabilitate the San Rafael Bus Lot in front of the heavy duty maintenance shop and body shop, and the Novato Employee parking lot. This project was advertised for bids on February 17, 2004, and bids were opened on March 16, 2004. The Board approved the recommendation to award contract on March 26, 2004. The selected Contractor, Maggiora & Ghilotti, Inc., was issued the Notice to Proceed effective April 9, 2004. The Contractor completed all contract work on May 21, 2004.

San Rafael Bus Facility Water Piping Modifications, Contract No. 2005-BT-5. Staff prepared the design plans and bid documents to modify the existing water piping to address deficiencies due to ground settlement, and to install additional thrust blocks and new cathodic protection anodes to protect the piping system. This project was advertised on June 15, and bids opened on July 13, 2004. The recommendation to award contract to low bidder was approved by the General Manager on July 23, 2004. Notice to Proceed was issued August 9, 2004, to Charlie Yu-Hwa Pa dba P&A Construction Company. The water piping modification work was completed on November 11, 2004, including the final sanitization of the water system.

Toll Plaza Transfer Points and Merchant Road Improvements. Staff is preparing the design plans for this project to improve the four bus stops and two bus shelters at the Toll Plaza, to rehabilitate the deteriorated pavement of Merchant Road, to construct bicycle lanes along Merchant Road, and to construct hiking trails to access the nearby historic batteries. This expanded scope of work will require a budget augmentation if the Board authorizes proceeding with the larger project. The overall design has been submitted to NPS for review and comments. The first phase of the project will include improvements to the four bus stops at the Toll Plaza, the East parking lot and access to IS area, and is tentatively scheduled to be advertised for construction in summer of 2005. The remaining work to improve the Merchant Road, bicycle lanes and hiking trails will be combined with the Presidio Trust's project to realign Merchant Road, to be scheduled when funding is available.

San Rafael Bus Maintenance Facility, Site Remediation Investigation. The District has been working for five years to closeout this site. The criteria for close-out has changed with the passage of time. The Regional Water Quality Control Board requested testing for a groundwater constituent (MTBE) that was not part of the original testing protocol. The District has attempted to address the RWQCB's concerns with prior test samples. This has not proven successful. The RWQCB will not close out this site until this new testing is performed and results are found to be acceptable. The District is in the process of preparing an RFP for a new contract to obtain additional test samples required by the RWQCB. The sample results will determine what additional work will be required prior to site closeout.

Santa Rosa Bus Facility – Site Remediation. On October 13, 1999, staff received a letter from the North Coast Regional Water Quality Control Board (NCRWQCB) that outlined the requirements for site closure. The District has completed four rounds of semi-annual well monitoring as well as all other site-closure action items required by the NCRWQCB. The District submitted a final report requesting site closure to the NCRWQCB in February 2002 with respect to the diesel contamination at the site. In addition, the NCRWQCB, in a letter dated December 18, 2000, requested additional information and investigation regarding the presence of VOC pollutants on the site. The District responded that the VOC pollutants did not originate from the District property but migrated onto the site from the neighboring Hewlett-Packard (HP) property. The NCRWQCB responded that the two property owners needed to resolve this issue. A meeting between the District and HP occurred on March 26, 2001. As a result of this meeting, the District and HP jointly obtained test data information regarding VOC pollutants for submittal to the NCRWQCB. The first joint report was submitted for review in October 2001. The District received a response to its site closeout letter request in May 2002 from the NCRWQCB requesting additional monitoring for petroleum hydrocarbons and VOC pollutants. Staff plans to meet with the NCRWQCB case officer to discuss the Water Quality Board's request for continued monitoring and to develop an agreed scope of work that may lead to site closure. The second report with joint monitoring data on VOC pollutants was submitted by HP to the NCRWQCB in

October 2002. The NCRWQCB has requested a written response from the District to the HP report. The District responded and met with the NCRWQCB to reach an agreement on remaining concerns so that this site may be closed. The NCRWQCB evaluated the information submitted by the District and requested that the District submit a final report regarding the VOC pollutants by December 2003. The final report was submitted to the NCRWQCB on December 24, 2003. The NCRWQCB responded in late March 2005 to the District's report and is requesting the District to develop a plan for further mitigation. The District is reviewing the response and will be meeting with the NCRWQCB to clarify its request prior to performing any further work.

Novato Bus Facility – Site Remediation. The final remedial investigation report was submitted to the San Francisco RWQCB on May 7, 1997. The final report was reviewed by the SFRWQCB, and the recommended corrective actions were approved by letter dated June 4, 1997. Monitoring of groundwater has been occurring quarterly at the site. The District has, by letter dated July 10, 2001, received approval from RWQCB on a work plan for removal of residual fuel in groundwater. The work plan consisted of injecting oxygen-releasing compounds (ORC) into the soil and groundwater. The RWQCB also requested additional delineation of groundwater pollutants. The District authorized its consultant to install one additional groundwater well to monitor the groundwater and report to the RWQCB the testing results. The additional monitoring well was installed in December 2001. One round of injection of oxygen-releasing compounds was also completed in December 2001. The SFRWQCB reviewed the District's February 2002 report and requested a second round of ORC injection in the groundwater and four additional quarters of monitoring to determine the ORC injection effectiveness in cleaning the groundwater. The District wrote an amendment to the PSA with its consultant to continue monitoring and reporting to the RWQCB. The recent monitoring discovered a spike in contaminant levels in the monitoring wells. The District reported the findings to the water board and is developing an action plan to address the findings.

FERRY FACILITIES

Ferry Security Enhancements, Contracts No. 2004-FT-7A and 2005-FT-2. Staff prepared design plans to enhance the security at the San Francisco and Larkspur Ferry Terminals. An architectural consultant, FMG Architects, was engaged to review the design plans to ensure esthetics and compatibility with existing facilities, and to address other issues related to architectural design. This TSA-funded project was advertised for bids on May 11, and only one bid was received and opened June 15, 2004. A recommendation to reject the sole bid was approved by Board on June 25, 2004. Staff revised the bid documents and readvertised the project on July 20, 2004, as Contract No. 2005-FT-2. Bids were opened August 17, 2004. The recommendation to award the contract to the single bidder, Valentine Corporation, was approved by the Board on September 24, 2004. The Notice to Proceed was issued effective October 13, 2004. The Contractor has completed trenching and conduit installation, and is proceeding to install the security wall, roll-up doors, security gates and security cameras. The project is scheduled to be completed in April 2005.

Larkspur Ferry Terminal Berth Dredging, Contract No. 2005-FT-1. The ferry berths at Larkspur require maintenance dredging every three years to ensure sufficient clearance for the ferries and to remove sediment build-up. The Board, on June 13, 2003, authorized staff to enter into an agreement with Anchor Environmental to assist the District in preparing a contract for this work. The construction contract was advertised on May 25, 2004, and bids were opened on June 29, 2004. The Board of Directors authorized award of Contract No. 2005-FT-1 to Dutra Dredging Company at its July 23,

2004, meeting and the Notice to Proceed was issued July 30, 2004. The Contractor began dredging on September 16, 2004, and demobilized from the site October 23, 2004. The District performed a post-dredge survey on October 28, 2004, and directed Dutra to return to the site and complete dredging of high spots. Dutra remobilized on November 18, 2004, and completed dredging on November 24, 2004. The District accepted the project on December 14, 2004, and is proceeding with finalizing the project. Larkspur Ferry Terminal Kiosk Roof Replacements, Contract No. 2004-FT-1. Staff prepared the design plans and bid documents to replace the built-up roofing of the office and bathroom kiosks. The contract was advertised for bids on July 15, and five bids were opened on August 12, 2003. The General Manager approved awarding the contract to the low bidder, Avalon Restoration Company. The Notice to Proceed was issued on September 17, 2003, and field construction started on September 30, 2003. The Contractor completed contract work on November 20, 2003. The punch list items were completed on May 12, 2004. The final contract payment is withheld pending resolution of two stop notices filed by subcontractors.

Corte Madera Ecological Reserve (CMER) Tidal Wetlands Restoration Project. As a condition of a 1988 U.S. Army Corps of Engineers (COE) Permit for maintenance dredging of the Larkspur Ferry Terminal, the District performed a study to assess the potential impacts of ferry operations on erosion at the CMER. The study also investigated creating replacement habitat for a native bird species, the clapper rail, due to erosion of existing habitat. In consultation with the COE and U.S. Fish & Wildlife Service (USFWS), the District agreed to create 2 acres of tidal marsh habitat on the District's 72-acre parcel adjacent to CMER as mitigation for the erosion impacts. Also, in connection with the 1996 acquisition of the high-speed ferryboat, the Del Norte, the District agreed to create an additional 2 acres of clapper rail habitat. A conceptual design report and a draft environmental Initial Study (IS) for the marsh restoration project, which will consist of the restoration of 3½ acres of tidal wetlands, 2 acres of seasonal wetlands, and the relocation of a public access easement that exists on the levee surrounding the parcel, were prepared in 1999. Final Plans and Specifications and permits from the Town of Corte Madera, the COE, USFWS and BCDC are required in order to advertise the project for construction in 2004. The Board authorized award of a Professional Services Agreement with Philip William & Associates on September 19, 2003. The Notice to Proceed was issued on October 8, 2003. Permitting and design work for the project is underway. A Notice of Intent to adopt an Initial Study and Mitigated Negative Declaration (MND) was submitted to the State Clearinghouse and other interested parties on December 29, 2003. The comment period ended on January 28, 2004. Staff is working with the Town of Corte Madera to finalize the public access easement relocation prior to finalizing the IS/MND. The Corps of Engineers met with District staff and stated they wanted to re-evaluate the proposed mitigation plan as well as perform a new jurisdictional determination (JD) of the entire 72-acre parcel. The District and COE will meet after the JD is performed to further discuss the project.

Contract Time Expended as of March 31, 2005					
Project	Contract	Contract Working Days	Elapsed Contract Days	Authorized Contract Time Extension Days	Contract Time Expended
GGB Seismic Retrofit of South Approach (Phase II) (calendar days) (SOJV)	99-B-5	1,300	1,397	448 (NOTE 1)	79.92%
San Rafael Bus Facility Gas Tank Replacement (American Construction) <i>Notice of Completion 3/16/05</i>	2004-BT-9	120	241	7	100.00%
Marin County Bus Stop Imp. Phase II (Stone Engineering) <i>Notice of Completion 2/22/05</i>	2004-BT-10	110	224	103	100.00%
Ferry Security Enhancements (Valentine)	2005-FT-1	90	169	49	121.58%
Toll Plaza Admin. Trailers Rehab Phase II (BMC Contractors) <i>Notice of Completion 3/8/05</i>	2005-D-2	75	105	30	100.00%

NOTE 1 – 448 days added to the contract time for the authorized extra work of repairing and painting at the South Approach Viaduct and the Fort Point Arch.

Fiscal Impact

There is no fiscal impact relative to this status report.

DJM/dh